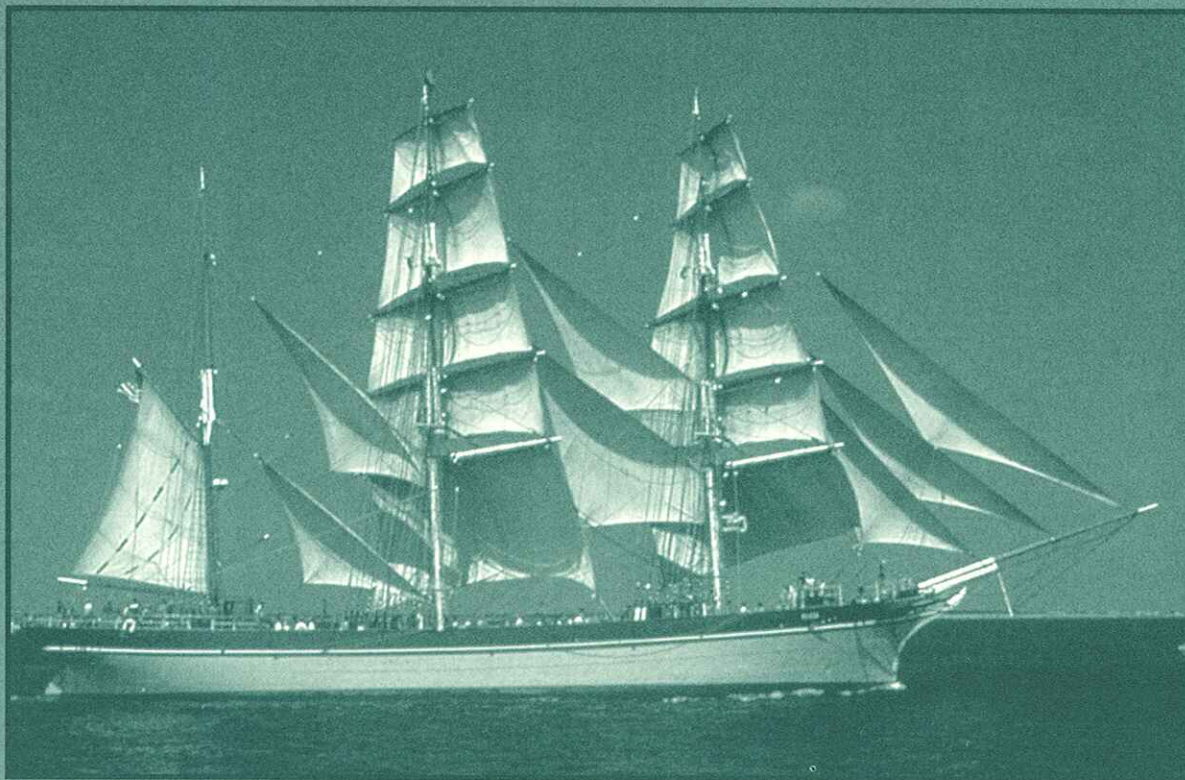


# **Texas Coastal Management Program**



## **2000 Annual Report**

## Coastal Coordination Council

### Chairman

**The Honorable David Dewhurst**  
Commissioner  
Texas General Land Office

### Members

**The Honorable Michael Williams**  
Commissioner  
Railroad Commission of Texas

**The Honorable William Clayton**  
Coastal Local Government Representative

**Mr. John Barrett**  
Agriculture Representative

**Mr. Bob Dunkin**  
Coastal Business Representative

**Mr. Jack Hunt**  
Member  
Texas Water Development Board

**Mr. Robert Huston**  
Chairman  
Texas Natural Resource Conservation Commission

**Mr. John W. Johnson**  
Commissioner  
Texas Transportation Commission

**Ms. Elizabeth Nisbet**  
Coastal Citizen Representative

**Mr. Donald Swann**  
Member  
Texas State Soil and Water Conservation Board

**Mr. Mark Watson**  
Commissioner  
Parks and Wildlife Commission

## Coastal Coordination Act of 1991

It is declared to be the policy of this state to make more effective and efficient use of public funds and provide for more effective and efficient management of coastal natural resource areas, and to better serve the people of Texas by:

- continually reviewing the principal coastal problems of state concern, coordinating the performance of government programs affecting coastal natural resource areas, and coordinating the measures required to resolve identified coastal problems; and
- making all coastal management processes more visible, accessible, coherent, consistent, and accountable to the people of Texas.

*(Texas Natural Resources Code §33.202(a))*

**Cover Photo:** The Elissa, Texas' only 19th-century tall ship, docked in Galveston regularly during the 1880s to deliver thousands of immigrants to Texas soil. The Galveston Historical Foundation funded the majority of the ship's \$3.6 million restoration in the early 1980s. Today the 400-ton barkentine, built in Scotland in 1877, can be found at the Texas Seaport Museum in Galveston.



# Contents

---

<b>Chapter 1</b>	<b>Program Overview</b>	<b>1</b>
	Texas Sunset Review	1
	Section 312 Review	2
<b>Chapter 2</b>	<b>Program Highlights</b>	<b>3</b>
	Federal and State Consistency	3
	Permitting Assistance Office	7
	Streamlining the Wetlands Permitting Process	8
	Status and Trends of Wetlands on Texas Barrier Islands	8
	Texas Coastal Nonpoint-Source Pollution Control Program	8
	Texas Beach and Bay Access Guide	11
<b>Chapter 3</b>	<b>Strategic Plan</b>	<b>13</b>
<b>Chapter 4</b>	<b>Grants Program</b>	<b>15</b>
	Subgrants Awarded in Fiscal Year 2000	17
	Description of Subgrants Awarded in Fiscal Year 2000	21
<b>Publications</b>		<b>29</b>

Each year the Texas Coastal Management Program (CMP) funds numerous coastal projects through a competitive grants process and undertakes a variety of coastal initiatives aimed at protecting and enhancing 16 coastal natural resource areas (CNRAs). The Coastal Coordination Council (Council) has continued to refine the CMP by improving procedures and internal operations and by increasing efforts to conserve and protect coastal natural resources.

During 2000, the Council awarded funding for 32 coastal projects, developed mechanisms to expedite the federal consistency process, and worked to coordinate, streamline, and develop new state and federal agency policies that affect CNRAs. The Council has shown time and again its ability to invest in the coast wisely and to make good use of federal funds for the state. The positive results are due to an 11-member Council with a diversity of backgrounds and a lot of common sense. In addition to the day-to-day activities of the program, this past year was an unusually busy one. The Texas Sunset Advisory Commission reviewed the Council for the first time and developed a set of recommendations based on its evaluation of the Council's role in coastal management. Also, the Council prepared for the initiation of a National Oceanic and Atmospheric Administration (NOAA) evaluation of the CMP.

### Texas Sunset Review

Under the Sunset Act, which became effective in 1977, Texas state agencies undergo a formal review approximately once every 12 years. The review assesses whether an agency is fulfilling its statutory obligations and whether there is a need for it to continue to operate. The Sunset Advisory Commission looks for potential duplication of other agency programs and considers innovative ways to improve an agency's operations and activities. Once the Commission reviews an agency's functions, it considers public comment and devel-



ops a list of recommendations to increase the agency's effectiveness. The Commission applies a set of standard across-the-board recommendations to all agencies, such as requiring specific provisions relating to conflicts of interest and requiring that information on standards of conduct be provided to members of policymaking bodies. The Commission began its first review of the Council in mid-1999 and will provide a full report to the Texas Legislature during the 2001 legislative session. The Commission's report will include an assessment of the Council and a list of recommendations.

## Section 312 Review

Section 312 of the Coastal Zone Management Act (CZMA) requires NOAA to evaluate all federally approved coastal management programs every three years. The purpose of the evaluation is to determine

how well a state has met CZMA goals and implemented its program, and to provide recommendations for program areas in need of improvement. These recommendations are typically either "program suggestions" or "necessary actions." A program suggestion is an action that the state should take to improve its program. A necessary action is one that the state must take prior to the next regularly scheduled evaluation. The review process provides opportunities for public participation, including community meetings and submission of written comments by the public. NOAA then prepares a written assessment detailing the extent to which the state has implemented and enforced the program. NOAA reviewed the Texas program for the first time in December 2000 and is preparing its evaluation findings. NOAA's preliminary assessment of the CMP was positive. The draft findings will be sent to the state for review in February 2001. NOAA's final findings are due in June 2001.



Having sponsored a variety of coastal programs and projects that have really begun to flourish within the last four years, the CMP is beginning to make its presence known. The CMP is known not only for its coastal programs, such as the grants program that awards close to \$2 million to coastal communities annually, but also for its Permitting Assistance Office (PAO), which provides technical assistance to applicants seeking permits. More and more applicants are taking advantage of the PAO's services each year.

Other key elements of the CMP include federal consistency review, shoreline access, and targeting nonpoint-source water pollution. A significant addition has been made to the federal consistency review process, a mechanism used to ensure that projects potentially impacting coastal resources are consistent with the CMP. The Council recently adopted an enforceable fisheries policy making federal activities involving fisheries subject to the program. With regard to shoreline access, Council staff is developing the Texas Beach and Bay Access Guide, a publication that will provide useful recreational information for bay users and beachgoers. Information obtained from this project will be posted on the General Land Office's (GLO's) Web site. Also, the Council is developing a

coastwide strategy for addressing nonpoint-source water pollution through the Texas Coastal Nonpoint-Source Pollution Control Program, discussed later in this chapter.

### Federal and State Consistency

Approval of the CMP gave Texas the authority to review proposed federal actions that are in or may affect land and water resources in the Texas coastal zone. This process, called federal consistency review, allows Texas to review the following activities:



- (1) projects requiring a federal license or permit;
- (2) federal financial assistance to state and local governments; and
- (3) direct activities by federal agencies.

These activities are evaluated for potential impacts to CNRAs and must comply with the goals and policies of the program. There are 16 CNRAs designated under the program. They are:

- Waters of the Open Gulf of Mexico
- Waters Under Tidal Influence
- Submerged Lands
- Coastal Wetlands
- Submerged Aquatic Vegetation
- Tidal Sand and Mud Flats
- Oyster Reefs
- Hard Substrate Reefs
- Coastal Barriers
- Coastal Shore Areas
- Gulf Beaches
- Critical Dune Areas
- Special Hazard Areas
- Critical Erosion Areas
- Coastal Historic Area
- Coastal Preserves

For fiscal year 2000, 449 proposed federal actions were reviewed for consistency. Council staff reviewed primarily U.S. Army Corps of Engineers permit applications and Minerals Management Service outer continental shelf mineral plans and leases and forwarded their recommendations to the Council for consideration.

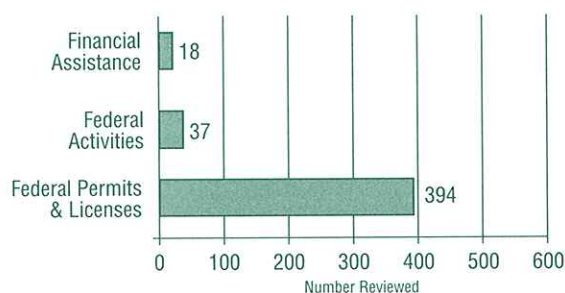
The public is encouraged to participate in this process through the *Texas Register* notification system or the GLO Web site at <http://www.glo.state.tx.us>.

**Federal licenses or permits** are those issued by a federal agency which govern land or water uses in the coastal zone. One example is a Corps of Engineers permit for pier or boat dock construction. A total of 394 actions requiring a federal license or permit were reviewed during 2000.

**Federal activities** are those performed by or for a federal agency in response to its statutory responsibility. A total of 37 federal activities, including maintenance dredging and changes to the Corps' nationwide permitting processes, were reviewed during 2000.

**Financial assistance** projects are state or local applications for federal funding. A total of 18 financial assistance projects were reviewed dur-

Breakdown of Federal Permits & Licenses, Activities, and Financial Assistance Projects Reviewed in 2000





ing 2000. One upcoming change in the federal consistency review process is that the Texas State Clearinghouse will be routing its projects subject to consistency review via the Internet in the near future. The clearinghouse, known as the Texas Review and Comment System (TRACs), routinely circulates copies of applications for federal funding to give state, regional, and local governments the opportunity to review these projects before they are funded. The Corps of Engineers already uses the Internet to distribute its public notices for applicants seeking federal permits.

### Referral of Stedman Marina

One federal action was referred to the Council for review during fiscal year 2000. On June 28, 2000, the Council reviewed a Corps of Engineers permit application from a private citizen to construct a commercial marina and private living quarters on Redfish Bay in Nueces County. The Council's goal was to determine to what extent the proposed project would impact CNRAs. The Council determined that the project would impact seagrasses and deemed it inconsistent due to insufficient information. The Corps of Engineers denied the permit on November 16, 2000. Currently, the applicant is working with the local municipality to develop an acceptable project design. Once it is complete, the applicant will confer with Council staff to gain input on the likelihood of the revised project design being consistent with the program's goals and policies.



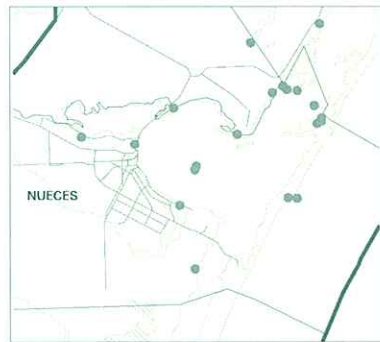
### Development of a Fisheries Policy

When the CMP was initially approved, there was no policy in place for reviewing federal actions that relate to the management of fishery resources. This past year changed that. On June 28, 2000, the Council adopted an enforceable policy that includes fishery habitat under the CMP's "waters of the open Gulf of Mexico" CNRA designation and makes the adoption of management measures by the National Marine Fisheries Service a federal agency activity subject to the CMP.

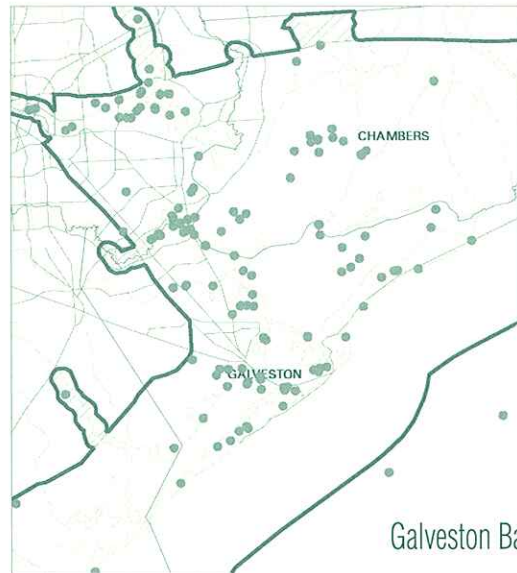
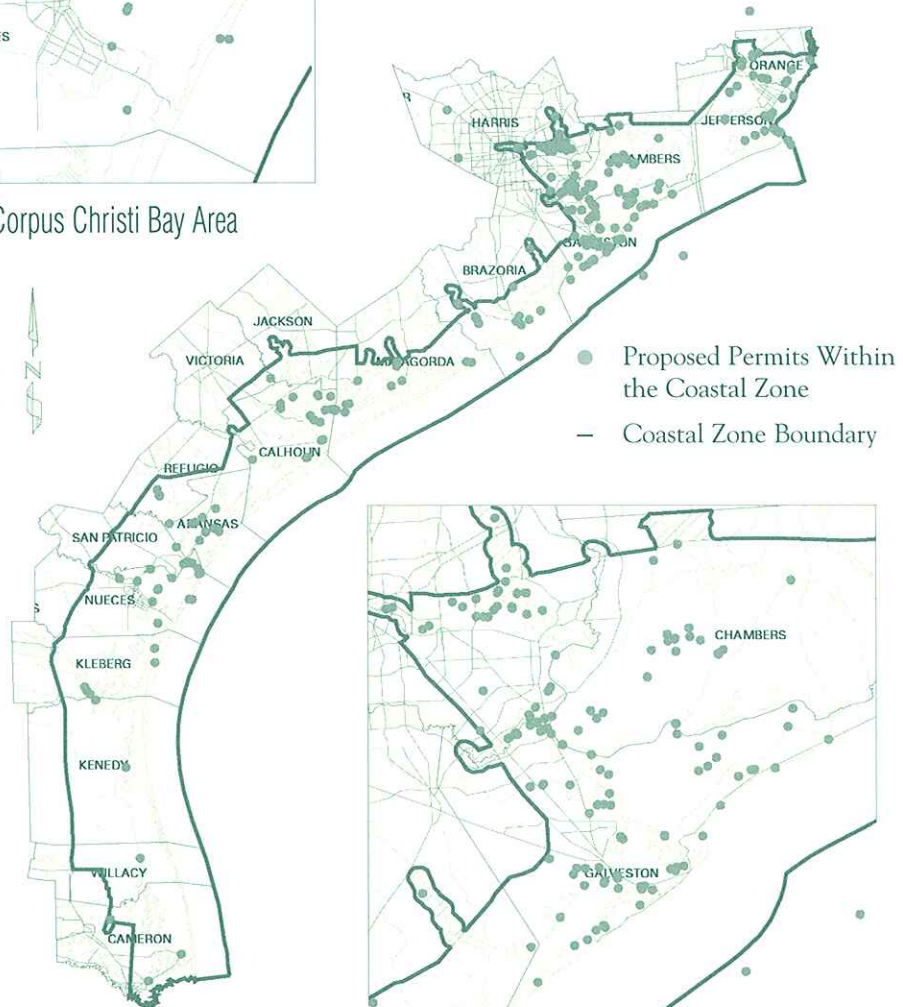
As the lead networked agency for fishery issues, the Texas Parks and Wildlife Department is responsible for reviewing proposed fishery management measures for consistency with the CMP goals and policies and for notifying the Council Secretary of any inconsistent action for potential referral to the Council.



## U.S. Army Corps of Engineers Proposed Permits – FY 2000



Corpus Christi Bay Area



Galveston Bay Area

## Council Rule Amendments

In addition to adding a fisheries policy, the Council approved several rule amendments to clarify the Council's rules and bring them up to date with changes in federal law and to simplify the consistency review process. The Council adopted rules that make the development of total maximum daily loads (TMDLs) mandated by the Environmental Protection Agency (EPA) a federal action subject to the CMP. The corresponding CMP policy states that the development of TMDLs must incorporate scientifically valid models and data and provide opportunities for public input from affected stakeholders.

Additional amendments were made to the Council's rules relating to federal consistency



review and the functioning of the Council. The GLO's Web site is now being used in addition to the *Texas Register* to comply with the 30-day public notice requirement for review of federal consistency determinations. With regard to the federal consistency review process, the Council's rules were modified to officially recognize that the review period only begins once an administratively complete consistency determination from the federal agency has been received. To this end, the term "administratively complete" is now defined in the rules.

## State Consistency

State consistency requires that the rules and actions of Council member agencies that are "networked" into the program be consistent with the CMP's goals and policies. Networked agencies are those that have activities or rules that affect or protect CNRAs. There were no agency rules submitted to the Council for certification this fiscal year. Networked agencies reported that a total of 1,543 permitting or approval actions and 83 rulemaking actions were taken during fiscal year 2000. A total of 260 of these permitting or approval actions were reported as having no direct and significant adverse effect on CNRAs. A total of 4,768 enforcement actions were taken.

## Permitting Assistance Office

The Small Business and Individual Permitting Assistance Office, located in Corpus Christi, Texas, is a clearinghouse for permit information



and is designed to assist applicants with permitting requirements or in developing permit applications. The permitting assistance office can schedule meetings between an applicant and state and federal agency staff or can meet with the applicant on site to provide site-specific guidance on alternative project designs or on how to reduce impacts to natural resources. This effort often helps the applicant develop a project that can be expedited through the permitting process. During fiscal year 2000, the office received 298 requests for technical assistance.

### Streamlining the Wetlands Permitting Process

The Council is undertaking several initiatives to streamline the wetlands permitting process, one of which is coordinating with agencies on the development of a joint state and federal wetlands permit application. Several options are being examined for the use of the joint application. In any case, the joint application could be used by multiple state and federal agencies and would result in closer coordination of the review process.

### Status and Trends of Wetlands on Texas Barrier Islands

The Council is working with the University of Texas to determine spatial and temporal changes in marshes, mangroves, tidal flats, and water bodies on barrier islands and peninsulas along the

central Texas coast from Matagorda Bay to Mesquite Bay. An analysis of wetland status and trends will be performed using historical and recent aerial photographs and field surveys. The purpose of this project is to improve the understanding of marsh changes on Texas barriers and to highlight wetlands threatened by erosion, subsidence, and other processes.

### Texas Coastal Nonpoint-Source Pollution Control Program

States with federally approved coastal management programs are required under section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 to develop and implement programs to address nonpoint-source (NPS) water pollution. NPS water pollution is rainfall, snowmelt, or irrigation that runs over land, picks up pollutants, and deposits them into lakes, rivers, and coastal waters. The purpose of this program is to identify sources of NPS pollution and develop recommendations for preventing it.

The Texas Coastal Nonpoint-Source Pollution Control Program is a networked program in that it relies on and closely coordinates existing NPS regulations among responsible agencies. For fiscal year 2000, Texas was allocated \$165,000 for continued development of its NPS program and for funding of related projects. Texas submitted its NPS program to NOAA and the EPA for approval in December 1998. Both federal agencies are currently reviewing the proposed NPS

program and have provided preliminary comments to Texas. NOAA and EPA's review of the Texas Coastal NPS program is scheduled to be complete by the end of 2001.

### **DNA Fingerprinting**

During the development of the NPS program, the Council identified certain gaps in information about nonpoint-source pollutant loadings to coastal waters. To address this need for data, the Council initiated the DNA Fingerprinting project to distinguish sources of bacteria that pose health hazards from contact recreation and oyster harvesting in Texas coastal waters.

The overall goal of this project is to improve the level of knowledge of the sources of bacteria found in Texas coastal waters. Phase I of this three-phase project, which was completed in January 2000, consisted of a literature search and development of a quality assurance work plan. Phase II, which is expected to be completed by March 31, 2001, will be the development of a library of *E. coli* DNA "fingerprints" from a range of animal sources which can be used for comparison with samples from unknown sources collected in the field.

### **Rangeland Rainfall and Runoff Study**

A three-year study of the quantity and quality of rainfall runoff from rangeland is being conducted in the San Patricio Soil and Water Conservation District. This initiative involves

the study of runoff waters originating from rangeland used by livestock and wildlife. Study sites are located on the Welder Wildlife Refuge north of Sinton, Texas. This study will establish a monitoring system to continuously gauge rainfall and runoff, and collect and analyze multiple rainfall and runoff samples to determine average concentrations of selected constituents.

### **Bilge Water Reclamation Demonstration Expansion Project**

In an effort to curb chronic waste oil spills from unidentifiable sources in Texas coastal waters, the Council is installing facilities to collect and process bilge water from coastal commercial fishing vessels. These facilities, being installed in navigation districts and port marinas and docks, provide an environmentally responsible way to dispose of bilge water, resulting in substantial savings in spill response expenditures for the State of Texas.

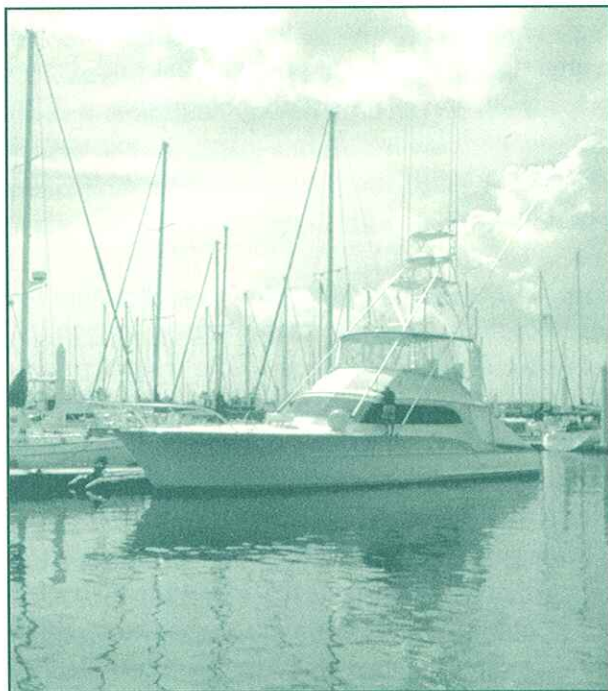
The reclamation system collects recoverable oil for recycling purposes and extracts suspended solids from the waste stream. The treatment system is so effective that treated water may be discharged directly back into the boat basin. The bilge water reclamation project is a low-cost alternative to more expensive disposal options. This innovative and effective system has resulted in a dramatic improvement in water quality in the boat basin and surrounding water body. Bilge water collection systems have been installed in



Port Isabel, Palacios and Port Lavaca, and one is planned for Sabine Pass.

### **Agricultural Water Quality**

Section 6217 funds are being used to cost-share the implementation of best management practices (BMPs) that have been proven to protect natural resources and water quality. The Willacy Soil and Water Conservation District is working with agricultural producers in the southern portion of the Texas coastal zone to implement water quality management plans. Once the Texas State Soil and Water Conservation Board certifies a plan, the producer is eligible to apply for cost-share assistance to implement BMPs.



### **Texas Sea Grant Clean Marina Program**

With Texas CMP grant funds, Texas Sea Grant is developing a Clean Marina Program modeled after programs implemented in Florida and Maryland. The Clean Marina Program is designed to encourage marinas, boatyards, and boaters to use simple, innovative practices to keep Texas coastal and inland waterway resources clean and to designate marinas as clean marinas. The clean marina designation lets boaters know that the marina adheres to or exceeds certain environmental guidelines followed by marina operators around the country. Tasks include the development of a comprehensive pollution-prevention guidebook for marinas, recognition for individual marinas through the "clean marinas" designation and incentive awards program, and promotion of environmentally responsible marina and boating practices. The program will provide technical assistance to marina operators, education programs for boaters, and resource materials with simple suggestions for day-to-day marina operations that protect the environment. A pilot project targeting marinas in the Clear Lake and Corpus Christi areas is being developed.

### **Seafood Composting Project**

This project, in Port O'Connor, will address non-point-source pollution originating from discarded fish carcasses. These carcasses present a potential public safety and health hazard, particularly to boaters who face the increased risk of stepping on pectoral or dorsal spines when launching a boat. Funding for this project will go toward collecting

these fish carcasses and using them as compost in a local community garden and "Learning to Grow" school enrichment projects, and distributing the compost to the community free of charge.

#### **Pollution-Prevention Partnership Nonpoint-Source Outreach Program**

Texas A&M University - Corpus Christi and the Coastal Bend Bays and Estuaries Program are developing a Nonpoint-Source Outreach Program for businesses, cities, schools, and the general public. This project will involve developing educational materials for teachers and students, providing permitting and technical assistance to cities and businesses, conducting workshops, and recruiting businesses for participation in the program.

#### **Zinc in Oysters of Nueces County**

Although water quality in Nueces Bay has improved dramatically in the past 25 years, the bay continues to demonstrate elevated concentrations of zinc. The Council is working with the Texas Natural Resource Conservation Commission (TNRCC) to examine possible sources and origins of zinc in the bay that may account for elevated levels in oysters. This project will involve examining historical trends of zinc in the bay through sediment core samples and collecting oysters from three sites in Nueces Bay to analyze tissues for zinc concentrations. Data on zinc contamination in oysters will be provided on a seasonal basis to determine the potential health risk to consumers.

#### **Assessment of Water Quality in Oso Bay/Oso Creek**

The Council is working with the TNRCC to characterize water quality conditions in Oso Bay/Oso Creek in the Corpus Christi Bay system. The purpose of this assessment is to collect water quality data and to develop information needed to improve water quality. This characterization will be used to establish TMDLs for Oso Bay/Oso Creek. A TMDL is the maximum amount of a pollutant that a lake, river, stream, or estuary can receive without seriously impairing its beneficial uses.

#### **Texas Beach and Bay Access Guide**

In approving the CMP, one area that NOAA directed Texas to focus on was improvement of public access to its beaches and bays. To meet this mandate, the Council is evaluating the current status of public access to beach and bay shorelines in order to assess which coastal areas are most in need of enhanced access.

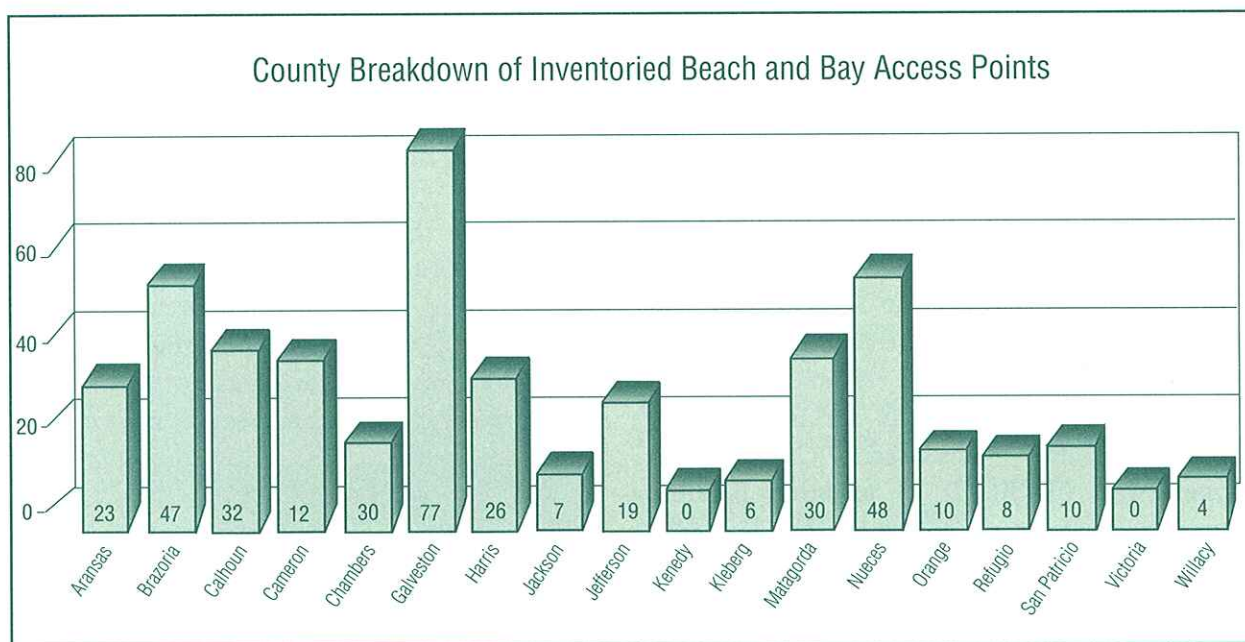
This initiative involves working with coastal communities to identify current public access sites, making recommendations for improving access in the 18 counties in the coastal zone, and developing a beach and bay access guide. The guide will list the activities and facilities available at each coastal recreation point and provide location information. The primary benefit of developing an access guide is to provide a central



source of recreational information for the Texas coast. There is no known, comprehensive guide for Texas beaches and bays designed for the general public. In addition to promoting tourism, the guide will help local governments take full advantage of their existing tourism and recreational markets.

This undertaking will also help the Council prioritize the award of grant funds for shoreline access projects. The most recent coastwide inventory of public access in Texas was conducted from 1998 to

1999. This inventory updated coastal recreational information that is more than 20 years old. A coastal access recreational Web site is also being developed. The Web site provides information on the types of activities, such as boating, fishing, and wildlife viewing, that can be found at each access point and whether a point has restrooms, electricity, or lighting or charges an admission fee. For the most up-to-date information, visit the GLO's Web site at [www.glo.state.tx.us/coastal/access](http://www.glo.state.tx.us/coastal/access). The chart below shows the breakdown of the close to 400 access points inventoried along the Texas coast.



The Council is developing a strategic plan to provide a vision for the Texas coast in the year 2005 and to guide the Council during the next five years. The plan will identify areas that the Council should focus on to strengthen the CMP and areas where improved agency coordination is needed. It will also define the Council's role in achieving this vision and identify what projects, programs, or initiatives need to be implemented to realize this vision.

Because the CMP is a networked program, Council staff is inventorying the programs and projects undertaken or administered by each agency to identify any "gaps" or "overlaps" in the Council's responsibilities. Once the assessment is complete, Council staff will develop a list of action items to target those areas of coastal management that are not currently being comprehensively addressed by any of the Council agencies. In addition, areas where greater coordina-





tion should occur among the agencies will also be identified. Council agencies seek to increase efforts to share natural resource data.

Given the significant number of agencies and number of issues they deal with, the Council deter-

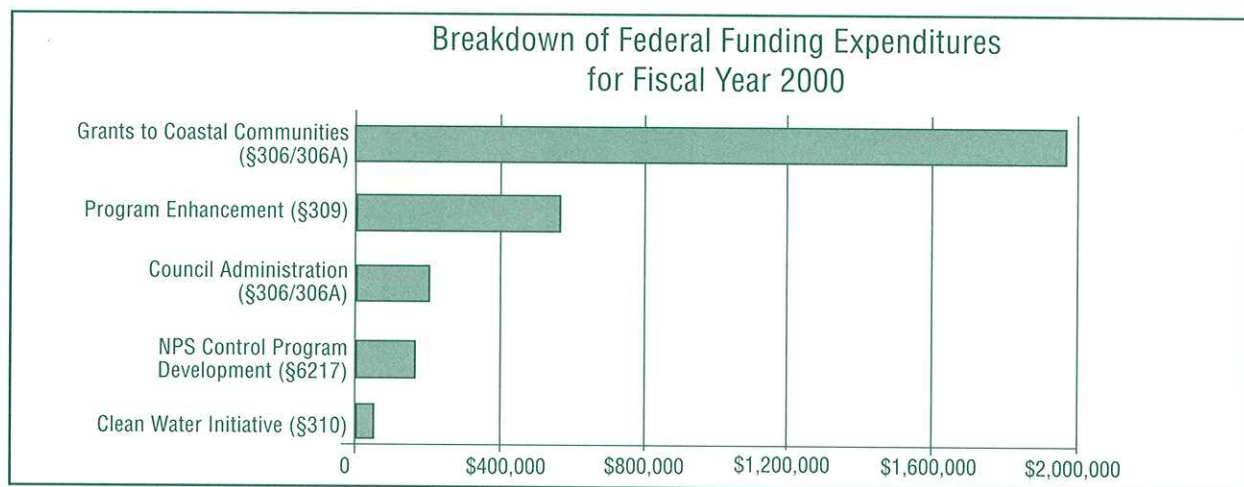
mined that the best approach was to divide the strategic plan into manageable units and initially focus on four CNRAs. The Council's plan will eventually include all 16 CNRAs but will initially focus on wetlands, submerged aquatic vegetation, oyster reefs, and gulf beaches.

For fiscal year 2000, the Council received more than \$2.8 million under the CZMA to implement the state coastal program. The CZMA provides funding for four purposes: coastal resource improvement program (§306/306A), program enhancement (§309), development of the state coastal nonpoint-source pollution control program (§6217), and the clean water initiative (§310).

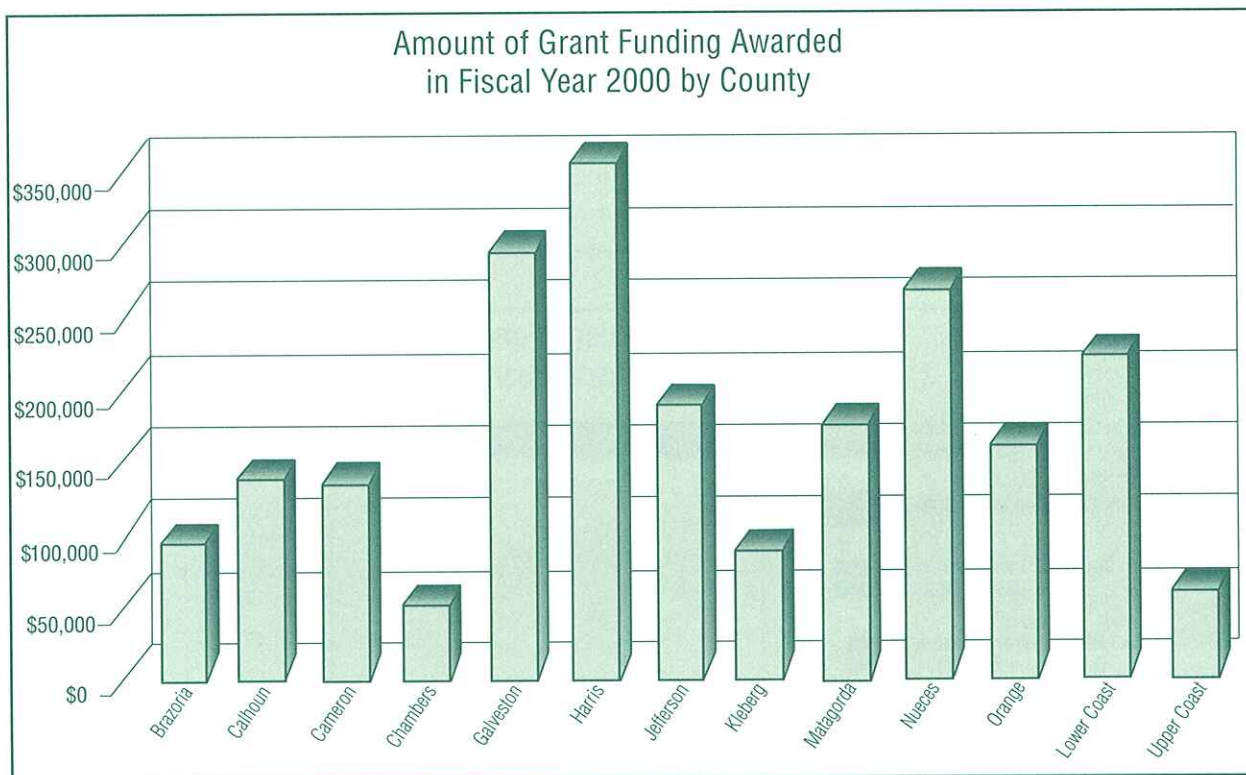
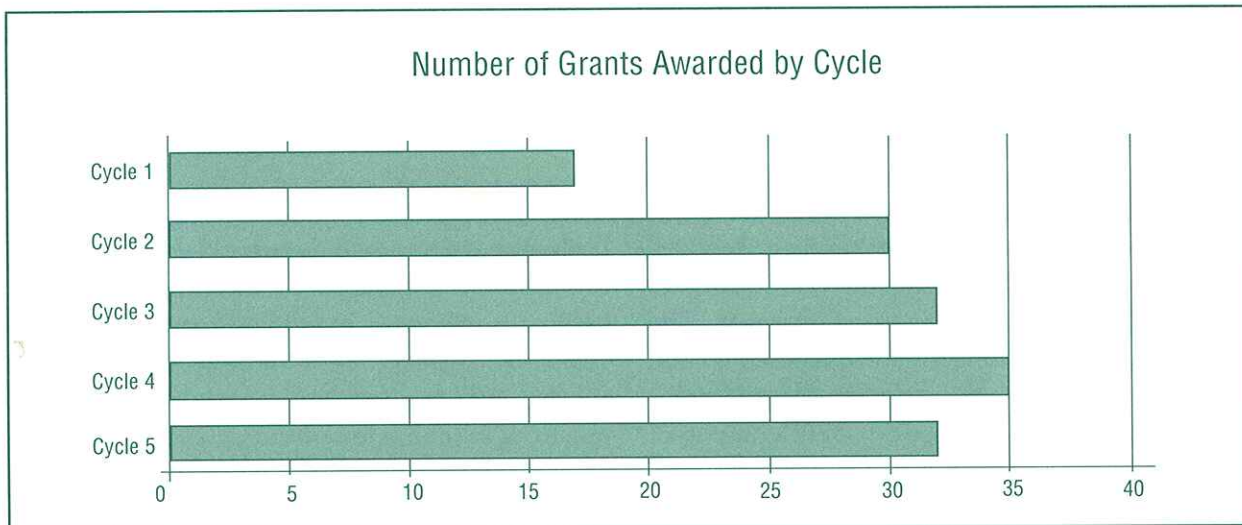
The Council earmarks most of this federal funding for grants to coastal communities. Only 10 percent is retained for administrative purposes. Texas is one of the few states that pass through 90 percent of their §306/306A funding in the form of grants.

Each year, the Council awards close to \$2 million to state and local entities for coastal projects. This funding is important in helping coastal communities protect against coastal hazards, improve beach access, enhance wetlands and other natural resources, revitalize waterfronts, and develop materials or other avenues for educating the public about the coast.

The Council's five-year strategic plan will play a pivotal role in directing how grant funds are spent. Once developed, the plan will allow the Council to maximize the use of CZMA funding by coordinating efforts and implementing projects that address areas of coastal management that may have been overlooked.







## Subgrants Awarded in Fiscal Year 2000

<i>Project</i>	<i>Funded Amount</i>	<i>Contact</i>
An Effective Evaluation of Promising Storm Water Source Control Technologies	\$52,988	Dana Blume, Port of Houston Authority P.O. Box 2562, Houston, TX 77252 713-670-2805
Bayfront Peninsula Improvement: A Waterfront Revitalization and Ecotourism Development Project	\$111,200	Claughton Johnson, City of Port Lavaca Port Commission P.O. Box 105, Port Lavaca, TX 77979 361-552-9794
Bayport Demonstration Marsh Circulation Improvement and Monitoring	\$67,824	Dana Blume, Port of Houston Authority P.O. Box 2562, Houston, TX 77252 713-670-2805
Beach/Dune Walkover Restoration	\$13,061	Danny Magouirk Texas Parks and Wildlife Department P.O. Box 1066, Sabine Pass, TX 77655 409-971-2559
Brazoria County Flood and Rainfall Gauges	\$22,335	Richard Tillman, Brazoria County 1800 C.R. 171, Angleton, TX 77515 979-864-1564
Buffalo Bayou Land Acquisition	\$95,750	Gail Johnson, City of Houston 2999 S. Wayside Drive, Houston, TX 77023 713-845-1022
Captain Clean Crab Beach Media Campaign	\$44,000	Elaine Lockhart Valley Proud Environmental Council 513 E. Jackson #304, Harlingen, TX 78550 956-412-8004
Coastal Hazards Atlas of Texas, Volume 4: A Tool for Hurricane Preparedness and Coastal Management	\$60,736	James Gibeaut, University of Texas at Austin University Station Box X, Austin, TX 78713 512-471-0344
Down to Earth at Mustang Island	\$28,047	Jay A. Raney, University of Texas at Austin University Station Box X, Austin, TX 78713 512-471-5357
Enhanced Litter Abatement on Bolivar Peninsula Beaches	\$50,000	John Lee, Jr., Galveston County Beach and Parks 601 Tremont, Suite 100, Galveston, TX 77550 409-770-5355



### Subgrants Awarded in Fiscal Year 2000 (continued)

<i>Project</i>	<i>Funded Amount</i>	<i>Contact</i>
Fort Anahuac Park	\$29,500	Jimmy Sylvia, Chambers County P.O. Box 939, Anahuac, TX 77514 409-267-8295
Galveston Bay Grass Carp Control Study	\$30,000	Linda Shead, Galveston Bay Foundation 17324-A Highway 3, Webster, TX 77598 281-332-3381
Galveston Bay Marsh Mania	\$50,000	Helen Drummond Galveston Bay Estuary Program 711 W. Bay Area Boulevard, Suite 210, Webster, TX 77598 281-332-9937
GIS Database of Hypoxia (Low Oxygen) Conditions in Corpus Christi Bay	\$38,736	Paul Montagna, University of Texas at Austin 750 Channelview Dr., Port Aransas, TX 78373 361-749-6779
Interpretive Picnic and Trail Area at Fort Travis Park	\$40,984	Thomas Sasser, Galveston County 601 Tremont, Suite 100, Galveston, TX 77550 409-770-5355
Kaufer-Hubert Memorial Park, Boat Ramp Renovation	\$65,000	Susan Ivy, Kleberg County P.O. Drawer 512, Kingsville, TX 78364 361-595-8591
Laguna Madre Comprehensive Conservation Plan	\$28,379	Michele Zwartjes The Nature Conservancy of Texas P.O. Box 1440, San Antonio, TX 78295 210-224-8774
Land Acquisition for Surfside Jetty Park Expansion Project	\$51,500	Kelly Hamby, Village of Surfside Beach 1304 Monument Dr., Surfside Beach, TX 77541 979-233-1531
Nourishment of Tiger Creek Marsh and Wetlands Ecosystem	\$134,175	Ron Sigler, Orange County Drainage District 8081 Old Highway 90, Orange, TX 77630 409-745-3225
Padre Balli Park	\$150,000	Elias Vasquez, Nueces County 901 Leopard Street, Corpus Christi, TX 78401 361-880-0225

## Subgrants Awarded in Fiscal Year 2000 (continued)

<i>Project</i>	<i>Funded Amount</i>	<i>Contact</i>
Palacios Pavilion Pier Renovation and Expansion	\$150,000	Charles Winfield, City of Palacios P.O. Box 845, Palacios, TX 77465 361-972-3605
Port Arthur Boardwalk - Phase II	\$150,000	Dale Watson, City of Port Arthur P.O. Box 1089, Port Arthur, TX 77641 409-983-8138
San Jacinto Marsh Restoration Project, Interpretation and Public Program Phase	\$60,000	Ted Hollingsworth Texas Parks and Wildlife Department 105 San Jacinto, La Porte, TX 77571 281-471-3200
Sand Resources and Movement off Galveston Island Beaches	\$88,134	Tammy Holliday Texas A&M University - Galveston P.O. Box 1675, Marine Science Dept., Galveston, TX 77553 409-740-4941
Shoreline Change in West and Christmas Bays	\$34,430	James Gibeaut, University of Texas at Austin University Station Box X, Austin, TX 78713 512-471-0344
South Padre Island Beach Erosion Response Project	\$98,500	Robert Fudge, Town of South Padre Island P.O. Box 3410, South Padre Island, TX 78597 956-761-1025
Summer 2001 Wetlands Eco-Program	\$16,177	Travis Lovelace Eddie V. Gray Wetlands Education Center 1724 Market Street, Baytown, TX 77520 (281) 420-7128
Texas High School Coastal Monitoring Program: Ball High School, Year Four	\$11,167	Barbara Cain Galveston Independent School District 3904 Avenue T, Galveston, TX 77550 409-766-5764
Texas High School Coastal Monitoring Program: Port Aransas High School, Year Two	\$10,894	Bill Slingerland Port Aransas Independent School District 100 Station Street, Port Aransas, TX 78373 361-749-1200



## Subgrants Awarded in Fiscal Year 2000 (continued)

<i>Project</i>	<i>Funded Amount</i>	<i>Contact</i>
Texas High School Coastal Monitoring Program: Port Isabel High School, Year Two	\$11,009	Kevin Tenison Point Isabel Independent School District 202 Port Road, Port Isabel, TX 78578 956-943-0030
Using Widgeon Grass to Restore Seagrass in the Armand Bayou Watershed	\$37,751	Jim Lester, University of Houston at Clear Lake 2700 Bay Area Blvd., Mail Box 540 Houston, TX 77058 281-283-3950
Wetlands Interpretive Overlooks on Corpus Christi Beach	\$85,000	Thomas Utter, City of Corpus Christi P.O. Box 9277, Corpus Christi, TX 77469 361-880-3232

## Description of Subgrants Awarded in Fiscal Year 2000

### Brazoria County

#### Brazoria County Flood and Rainfall Gauge

*Entity:* Brazoria County  
*Category:* Coastal Hazards  
*Funding:* \$22,335  
*Description:* Installation of flood and rainfall gauges that will report real-time water levels and rainfall events via a radio signal to a base station, which will automatically enter the collected information onto a Web page.

#### Land Acquisition for "Surfside Jetty Park Expansion" Project

*Entity:* Village of Surfside Beach  
*Category:* Shoreline Access  
*Funding:* \$51,500  
*Description:* Acquisition of land for use as channelfront park areas, public access corridors, and boat ramp site.

### Calhoun County

#### Bayfront Peninsula Improvement: A Waterfront Revitalization and Ecotourism Development Project

*Entity:* City of Port Lavaca  
Port Commission  
*Category:* Waterfront Revitalization  
*Funding:* \$111,200

*Description:* This project will involve placing sheet piling to protect the shoreline from erosion, removal of existing concrete rubble, and excavation to reshape the peninsula edge in order to construct a concrete walkway with steps down to the water's edge.

### Cameron County

#### Captain Clean Crab Clean Beach Media Campaign

*Entity:* Valley Proud Environmental Council  
*Category:* Public Education  
*Funding:* \$44,000  
*Description:* Initiative to educate Valley residents and tourists about the problems of beach litter through radio, newspaper, billboards, bumper stickers, fliers, and posters.

#### South Padre Island Beach Erosion Response Project

*Entity:* Town of South Padre Island  
*Category:* Coastal Hazards  
*Funding:* \$98,500  
*Description:* Project to move approximately 75,000 cubic yards of beach-quality sand on the north end of the Island to the Town of South Padre Island to widen the beach and to create a line of dunes.



**Texas High School Monitoring:  
Port Isabel High School—Year Two**

*Entity:* Port Isabel Independent School District  
*Category:* Public Education  
*Funding:* \$11,009  
*Description:* Program to teach students to measure the topography, map the vegetation line and shoreline, and observe weather and wave conditions.

**Chambers County**

**Fort Anahuac Park**

*Entity:* Chambers County  
*Category:* Shoreline Access  
*Funding:* \$29,500  
*Description:* Project to rebuild the restrooms at Fort Anahuac Park in Anahuac, Texas, and to bring them into compliance with the Americans with Disabilities Act (ADA).

**Galveston County**

**Enhanced Litter Abatement  
on Bolivar Peninsula Beaches**

*Entity:* Galveston County Beach and Parks Department  
*Category:* Critical Areas  
*Funding:* \$29,500  
*Description:* Purchase of a beach-cleaning machine to remove non-

biodegradable materials from peninsula beaches.

**Galveston Bay Grass Carp Control Study**

*Entity:* Galveston Bay Foundation  
*Category:* Critical Areas  
*Funding:* \$30,000  
*Description:* Evaluate methods for controlling grass carp populations and pilot methods for reducing carp damage to Galveston Bay wetlands.

**Galveston Bay Marsh Mania**

*Entity:* Galveston Bay Estuary Program  
*Category:* Critical Areas  
*Funding:* \$50,000  
*Description:* A one-day habitat restoration event held at several sites around Galveston Bay. Last year's event resulted in the restoration of at least 14 acres of marsh.

**Interpretive Picnic and Trail Area  
at Fort Travis Park**

*Entity:* Galveston County  
*Category:* Waterfront Revitalization  
*Funding:* \$40,984  
*Description:* Construction of picnic shelters and interpretive kiosks with educational signage and information about the Bolivar lighthouse and other points of interest.

### **Sand Resources and Movement off Galveston Island Beaches**

*Entity:* Texas A&M University-Galveston  
*Category:* Coastal Hazards  
*Funding:* \$88,134  
*Description:* Use of a multibeam seabed surface mapping device to profile two large survey areas for possible beach nourishment projects.

### **Texas High School Monitoring: Ball High School-Year Four**

*Entity:* Galveston Independent School District  
*Category:* Public Education  
*Funding:* \$11,167  
*Description:* Program to teach students to measure the topography, map the vegetation line and shoreline, and observe weather and wave conditions.

## **Harris County**

### **An Effectiveness Evaluation of Promising Storm Water Source Control Technologies**

*Entity:* Port of Houston Authority  
*Category:* Water Quality  
*Funding:* \$52,988  
*Description:* An evaluation to obtain quality-assured data demonstrating the effectiveness of a storm water quality management device which is intended to be deployed near the inlet of an

existing storm water conveyance system.

### **Bayport Demonstration Marsh Circulation Improvement and Monitoring**

*Entity:* Port of Houston Authority  
*Category:* Public Education  
*Funding:* \$67,824  
*Description:* This project will entail excavation of new circulation ditches throughout a 220-acre demonstration marsh and construction of footbridges and observation platforms.

### **Buffalo Bayou Land Acquisition**

*Entity:* City of Houston  
*Category:* Waterfront Revitalization  
*Funding:* \$95,750  
*Description:* Establishment of a living laboratory for schools, scout groups, and the general public to demonstrate wetland conservation.

### **San Jacinto Marsh Restoration**

*Entity:* Texas Parks and Wildlife Department  
*Category:* Public Education  
*Funding:* \$60,000  
*Description:* Construction at San Jacinto Battleground State Park of 900 feet of all-weather trail through coastal tallgrass prairie, and 600 feet of boardwalk trail across the marsh to the bottomland forest.



#### **Summer 2001 Wetlands Eco-Program**

*Entity:* City of Baytown  
*Category:* Public Education  
*Funding:* \$16,177  
*Description:* A one-week, nature-oriented summer program for 10 children ages 10 to 14 years old, offered over eight weeks (80 students). The program will be nature-oriented and will use the Galveston Bay estuarine wetlands, freshwater wetlands, and marine beaches as subject matter.

#### **Using Widgeon Grass to Restore Seagrass in the Armand Bayou Watershed**

*Entity:* Environmental Institute of Houston  
*Category:* Critical Areas  
*Funding:* \$37,751  
*Description:* Investigation of the effects of planting versus broadcast methods, enclosures versus open access plantings, use of seeds versus whole plants, and transplantation.

#### **Jefferson County**

##### **Beach/Dune Walkover Restoration**

*Entity:* Texas Parks and Wildlife Department  
*Category:* Shoreline Access  
*Funding:* \$13,061

*Description:* Removal of damaged planks on dune walkovers and repair and replacement of decking with new treated wood at Sea Rim State Park.

#### **Port Arthur Boardwalk-Phase II**

*Entity:* City of Port Arthur  
*Category:* Waterfront Revitalization  
*Funding:* \$150,000  
*Description:* Construction of a 70-foot pedestrian access bridge and extension of the boardwalk.

#### **Kleberg County**

##### **Kaufer-Hubert Memorial Park Boat Ramp**

*Entity:* Kleberg County  
*Category:* Waterfront Revitalization  
*Funding:* \$65,000  
*Description:* Renovation and dredging of an existing boat ramp and channel and reconstruction of four existing small piers.

#### **Matagorda County**

##### **Palacios Pavilion Pier Renovation and Expansion**

*Entity:* City of Palacios  
*Category:* Shoreline Access  
*Funding:* \$150,000  
*Description:* Replacement of a deteriorated T-head, providing additional access to the water for anglers and easier access for handicapped individuals.

## **Nueces County**

### **Down to Earth at Mustang Island**

*Entity:* The University of Texas at Austin  
*Category:* Public Education  
*Funding:* \$28,047  
*Description:* Production of a guide on the natural history of Mustang Island to be distributed to schools.

### **Padre Balli Park**

*Entity:* Nueces County  
*Category:* Waterfront Revitalization  
*Funding:* \$150,000  
*Description:* Construction of a multi-purpose facility including an ADA-compliant bathhouse, restroom, and shower facilities.

### **Texas High School Monitoring:**

#### **Port Aransas High School—Year Two**

*Entity:* Port Aransas Independent School District  
*Category:* Public Education  
*Funding:* \$10,894  
*Description:* A program to teach students to measure the topography, map the vegetation line and shoreline, and observe weather and wave conditions.

### **Wetlands Interpretive Overlooks on Corpus Christi Beach**

*Entity:* City of Corpus Christi  
*Category:* Public Education  
*Funding:* \$85,000

*Description:* Construction of a viewing platform and informational kiosk, and acquisition of 18 acres of wetlands.

## **Orange County**

### **Nourishment of Tiger Creek Marsh and Wetlands Ecosystem**

*Entity:* Orange County Drainage District  
*Category:* Critical Areas  
*Funding:* \$134,175  
*Description:* Improvement of drainage and redirection of fresh water to a starved and saltwater-threatened marsh system.

## **Upper Coast**

### **Shoreline Change in West and Christmas Bays**

*Entity:* The University of Texas at Austin  
*Category:* Information/Data Availability  
*Funding:* \$34,430  
*Description:* Project to determine the rate of shoreline change by mapping the shoreline since 1995 and using 1950s vertical aerial photography.

## **Lower Coast**

### **Coastal Hazards Atlas of Texas, Volume 4: A Tool for Hurricane Preparedness and Coastal Management**

*Entity:* The University of Texas at Austin  
*Category:* Information/Data Availability  
*Funding:* \$60,736



*Description:* Project to revise and update the current atlas from Baffin Bay to the Rio Grande, indicating current transportation routes, hurricane flooding areas, shoreline erosion, and subsidence and faulting.

**GIS Database of Hypoxia (Low Oxygen)  
Conditions in Corpus Christi Bay**

*Entity:* The University of Texas at Austin  
Marine Science Institute

*Category:* Information/Data Availability

*Funding:* \$38,736

*Description:* A determination of the causes of low oxygen conditions in Corpus Christi Bay.

**Coastal Hazards Atlas of Texas, Volume 4:  
A Laguna Madre Comprehensive  
Conservation Plan**

*Entity:* The Nature Conservancy of Texas

*Category:* Critical Areas

*Funding:* \$28,379

*Description:* Identification of critical conservation areas, key threats, and conservation strategies to develop a comprehensive conservation plan for Laguna Madre.

## Texas Coastal Management Program – Grant Cycle 5 Projects





# Publications

---

The Texas General Land Office has a variety of publications, packets and brochures relating to coastal issues available to the general public. Most are free of charge. In addition, many of these publications can be found at the GLO Web site on the Internet at [www.glo.state.tx.us](http://www.glo.state.tx.us).

## Available Publications, Packets, and Brochures

*Texas Coastal Management  
Program Annual Report, 1999*

*Mission/Aransas Watershed  
Wetland Conservation Plan, 1999*

*Texas Coastal Management  
Program Annual Report, 1998*

*Rules and Guidance Regarding the Dredging and  
Dredged Material Disposal and Placement  
Requirements of the Texas Coastal Management  
Program, 1997*

*Texas Coastwide Erosion Response Plan, 1996*

*Texas Coastal Management Program, Final  
Environmental Impact Statement, 1996*

*Texas Coastal Wetlands Packet*

*Texas Submerged Lands Packet*

*Texas Beaches & Dunes Poster*

*Texas Coastal Treasures Poster*

*Texas Coastal Wetlands Poster*

*Texas Submerged Lands Poster*

*On the Coast (newsletter)*

*Dune Protection Guide (brochure)*

For more information or to request a publication, call 1-800-998-4GLO (select option 6) or write to the Texas General Land Office, Grants, Education and Outreach Division, P.O. Box 12873, Austin, Texas 78711-2873.

**Writer**

Claire Randle-Martinez

**Contributors**

Sally Davenport, Leah Esparza, Janet Fatheree, Allison Martin,  
Lloyd Mullins, Melissa Porter, Blake Traudt,  
Ashley K. Wadick, Muriel Wright

**Design**

Andrea Morgan and Diana Harrell

**Maps**

Scot Friedman

A publication of the Texas General Land Office.  
Funded by a grant from the U.S. Department of Commerce,  
National Oceanic and Atmospheric Administration (NOAA).

Printed on recycled paper using soy-based inks. The Texas General Land Office does not discriminate on the basis of race, color, national origin, sex, sexual orientation, religion, age or disability in employment or the provision of services. To request an accessible format, call the ADA Coordinator at 512-463-5330 or contact us through RELAY Texas at 1-800-735-2988 or mail your request to P.O. Box 12873, Austin Texas 78711-2873.





Texas Coastal Management Program  
P.O. Box 12873  
Austin, Texas 78711-2873  
Phone: 1-800-998-4GLO  
Phone: 512-463-5385  
Fax: 512-475-0680  
Web site: [www.glo.state.tx.us](http://www.glo.state.tx.us)

Small Business and Individual Permitting Assistance Office  
Texas A&M University - Corpus Christi  
Natural Resources Building, Suite 2800  
6300 Ocean Drive  
Corpus Christi, Texas 78412-5599  
Toll-free Phone: 1-866-894-3578  
Phone: 361-825-3050  
Fax: 361-825-3465